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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,834	01/15/2002	Kelly Molenaar	MAC - 203	1333

7590 10/21/2004

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EXAMINER

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,834

Applicant(s)

MOLENAAR, KELLY

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizusawa et al., 4,568,216 (see marked-up attachment), in view of Edwards, 2,559,857.

Regarding claim 1, Mizusawa et al. disclose in Figure 6 a ball joint comprising an elongated shaft **1**, a ball **2**, a retaining member **20**, a housing **6**, and a fastening means **29a** for fastening the retaining member **20** in the housing **6**. The shaft **1** has an upper end **A2**, a lower end **A3**, and a longitudinal axis **x** running through the upper end **A2** and the lower end **A3**. The shaft **1** is threaded on the lower end **A3**. The ball **2** is rigidly fixed and surmounted on the upper end **A2** of the shaft **1**. The ball **2**, at a highest point opposite the upper end **A2** of the shaft **1**, having a truncated flat face **A6**. The member **20** is externally threaded (col. 5, lines 61-64) on the lower end **A9** of the member **20**. The housing **6** has an outside surface **A13**, a middle portion **A14**, and a lower end **A15**. The housing **6** is internally conformed at the lower end **A15** of the housing **6**. The

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middle portion **A14** of the housing **6** is internally threaded (col. 5, line 51-54). The middle portion **A14** has a means **A16** for attaching the housing **6** to a support arm of a suspension system. However, Mizusawa et al. fail to disclose the member **20** having a lubricating port.

Edwards teaches in Figure 1 a member **32** having a lubricating port (the hole where nipple 34 is mounted on) located in an upper surface **A8** thereof; and the lubricating port is openly connected to a duct **34** providing a passageway to lubricate the ball joint. Therefore, as taught by Edwards, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a lubricating port to lubricate the ball joint.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable Mizusawa et al., 4,568,216 (see marked-up attachment), in view of Edwards, 2,559,857, as applied to claim 1 above, and further in view of McEowen, 4,134,701.

Regarding claim 8, the combination of Mizusawa and Edwards fails to disclose shallow channels in the lower end **92** of the housing **91**. McEowen teaches in Figures 1, 3, 7 a lower end **16** of a housing **10** comprises shallow channels **46** for acting as grease reservoirs which accept grease (col. 1, lines 57-61 and col. 3, lines 41-43). Therefore, as taught by McEowen, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to comprise the lower end of the housing of Mizusawa with shallow channels for acting as grease reservoirs, which accept grease.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheublein, Jr. et al., 2,954,993 (see marked-up attachment), in view of Scheublein, Jr. et al., 3,103,377, and Maughan, 5,564,853.

Regarding claim 1, Scheublein, Jr. et al., '933 disclose in Figure 9 a ball joint comprising an elongated shaft 94, a ball 100, a retaining member 104, and a housing 91. The shaft 94 has an upper end A2, a lower end A3, and a longitudinal axis x running through the upper end A2 and the lower end A3. The shaft 94 is threaded on the lower end A3. The ball 100 is rigidly fixed and surmounted on the upper end A2 of the shaft 94. The member 104 is externally threaded (col. 5, lines 59-61) on the lower end A9 of the member 104. The housing 91 has an outside surface A13, a middle portion A14, and a lower end 92. The housing 91 is internally conformed at the lower end 92 of the housing 91. A portion of the housing 91 is internally threaded (col. 5, lines 59-61). The middle portion A14 has a means 95 for attaching the housing 91 to a support arm of a suspension system. The member 104 has lubricating port 106 located in the upper surface A8 thereof. The lubricating port is openly connected to a duct 107 providing a passageway. Applicant is reminded that the lower end 92 of the housing 91, being internally conformed, is for seating the ball.

However, Scheublein Jr. et al. fail to disclose the portion of the housing, internally threaded, being the middle portion as applicant argued that the portion of the housing that is internally threaded is the top portion in Scheublein Jr. et al. '933; a fastening means for fastening the retaining member 104 in the housing 91; and the ball 100, at a highest point opposite the upper end A2 of the shaft 94, having a truncated flat face.

Scheublein, Jr. et al. '933 teach in Figure 4 that a ball, at a highest point opposite an upper end of a shaft 1, having a truncated flat face (unreferenced above 59).

Scheublein, Jr. et al. '933 do not discuss the reason for truncating the ball to have a truncated flat face. It appears that a truncated flat face provides a gap for storing more lubricant than a ball without a truncated flat face. Therefore, as taught by Mizusawa et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the truncated flat face on the ball, at the highest point opposite an attachment of the shaft to provide a gap for storing more lubricant than a ball without a truncated flat face.

Maughan teaches in Figure 8 a ball joint comprising a fastening means 260, 262 for fastening a retaining member 244 in a housing 208 to stake the retaining member 244 in place (col. 7, lines 61-62). Therefore, as taught by Maughan, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a fastening means for fastening the member in the housing to stake the member in place.

Regarding claim 4, Scheublein, jrs et al. '933 disclose the attaching means 95 is external threads on an external surface of the middle portion A14 of the housing 91 (col. 5, lines 53-55).

Response to Arguments

Applicant's arguments filed 6/14/03 have been fully considered but they are not persuasive.

Applicant has argued that the Examiner has misunderstood applicant's invention by indicating that Mizusawa et al. contains a component 27 the examiner missed. In response, applicant has not pointed exactly what feature of the claim was missed. Thus, this argument is out of scope with the language of the claim. Applicant further argued that Edwards shows a component 36 that is a spring which urges a dished cap against the stud end and holds the stud in [an] operative position within the housing, and that the applicant's invention does not contain any spring because is not required to render one of ordinary skill in the art to look for references that contain a spring.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Therefore, the spring was not used as a teaching to combine the references but rather the teaching of the lubrication port from one reference to teach using the port in a ball-and-socket joint.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached from 9:30-6:00. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.G.

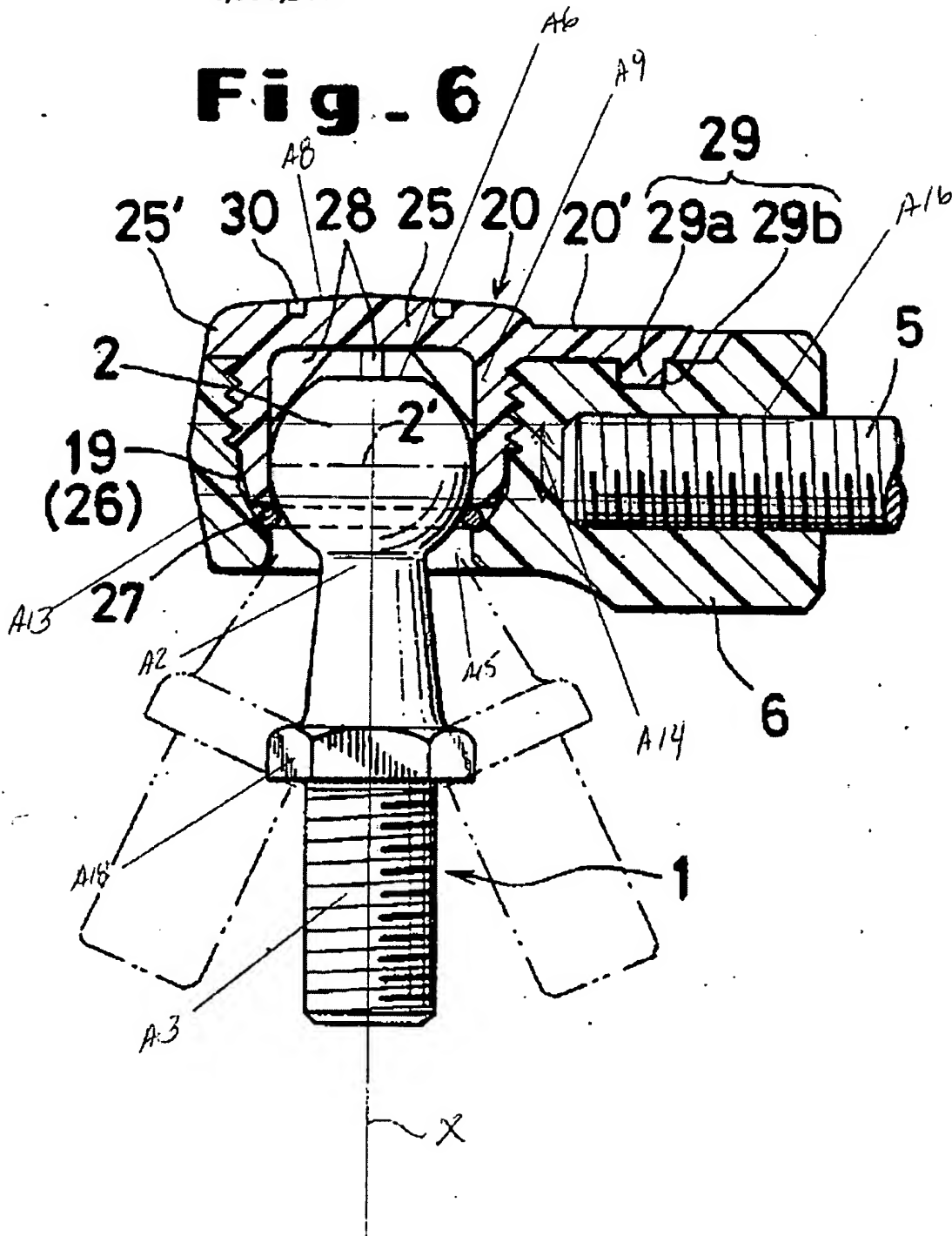
E.G.

October 1, 2004

Attachments: one marked-up attachment of Mizusawa et al., 4,568,216; and,
one marked-up attachment of Scheublein, Jr. et al., 2,954,993.

A handwritten signature in cursive script that reads "Daniel P. Stodola". The signature is written in black ink and is positioned above the printed name and title.

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600



(Scheublein, Jr. et al.)

